AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A process for purifying alpha-1-antitrypsin (A1AT) from alpha-1-antitrypsin-~~A1AT~~-containing solutions ~~or~~ from other protein components, comprising ~~the following steps~~:

   (a) subjecting an alpha-1-antitrypsin~~A1AT~~-containing solution to ion-exchange chromatography;

   (b) adding detergents and optionally a solvent for inactivating lipid-enveloped viruses;

   (c) followed by increasing the salt concentration to salt out the detergents.

2. (Currently Amended) The process according to claim 1, wherein said alpha-1-antitrypsin~~A1AT~~-containing solution has been obtained from the group consisting of blood plasma or its fractions, ~~preferably from~~ a reconstituted plasma fraction IV1 (Cohn), ~~or is derived~~ from a recombinantly or transgenically expressed ~~A1AT~~ alpha-1-antitrypsin preparation [[or]] and a fermentation supernantant.

3. (Currently Amended) The process according to claim 1, wherein ion-exchange chromatography is performed on an anion-exchange gel[[,]] ~~preferably DEAE-Sepharose® or DEAE-Sepharose® Fast Flow~~.

4. (Currently Amended) The process according to claim 1, wherein said virus inactivation according to step (b) is effected with Triton X-100, Polysorbate 80 (Tween 80), ~~TnBP~~ tri-n-butyl phosphate ~~and~~/or caprylic acid or caprylate, ~~preferably~~ at final concentrations of ≥

0.1% (w/w) Triton and Tween 80, ≥ 0.03% (w/w) ~~TnBP~~ tri-n-butyl phosphate, ≥ 0.1 mM caprylic acid or caprylate, with an incubation time of ≥0.1 hours[[,]] ~~preferably ≥ 1 hour, at ≥ 4 °C, especially at ≥ 15 °C~~.

5. (Currently Amended) The process according to claim 1, wherein the salt concentration of the solution is brought to ≥ 0.5 M in step (c) and particles formed thereby are ~~preferably~~ removed by filtration.

6. (Currently Amended) The process according to claim 1, wherein a further chromatography on hydrophobic chromatographic materials is performed.

7. (Currently Amended) The process according to claim 1, wherein a treatment of the alpha-1-antitrypsin~~A1AT~~-containing ~~fraction~~ solution with a material ~~which contains~~ comprising heparin in an immobilized form ~~(heparin-gel)~~ is performed.

8. (Currently Amended) The process according to claim 5, wherein a further virus inactivation step is performed afterwards, the virus inactivation step comprising ~~preferably~~ pasteurization in the presence of ≥ 0.5 M sodium citrate, amino acids, sugars or mixtures thereof.

9. (Currently Amended) The process according to claim 1, wherein the ion strength of the solution is ~~preferably~~ reduced by ~~ultra-/diafiltration~~ ultrafiltration, diafilatration, or ultrafiltration and diafiltration.

10. (Currently Amended) The process according to claim 1, wherein a separation of virus particles is performed[[,]] ~~preferably by nanofiltration, preferably~~ with filters having pore sizes of 15-20 nm.

11. (Currently Amended) The process according to claim 1, wherein the ~~A1AT~~ alpha-1-antitrypsin solution ~~fraction~~ obtained is stored as a liquid, frozen or freeze-dried preparation.

12. (Currently Amended) ~~A1AT~~ Alpha-1-antitrypsin having a purity of > 90%, an activity of ≥ 0.8 PEU/mg in its active form, an IgA content of ≤ 1 mg/ml, a residual detergent content of < 50 ppm, ~~especially < 10 ppm,~~ and a monomer content of > 90%, based on the total amount of ~~A1AT~~ alpha-1-antitrypsin, wherein the active form of alpha-1-antitrypsin has a maximum activity of 100%.

13. (Currently Amended) The ~~A1AT~~ alpha-1-antitrypsin according to claim 12, obtainable by a process comprising the following steps:

(a) ~~reconstitution of plasma fraction IV1 (Cohn)~~ providing an alpha-1-antitrypsin solution;

(b) anion-exchange chromatography ~~on DEAE-Sepharose® Fast Flow~~;

(c) optionally chromatography on a solid phase which comprises heparin in an immobilized form ~~(heparin affinity chromatography)~~;

(d) optionally hydrophobic interaction chromatography (HIC);

(e) virus inactivation with ≥ 0.1% (w/w) Triton[[/]] and ≥0.03% (w/w) ~~TnBP~~ tri-n-butyl phosphate with an incubation time of ≥ 1 hour at ≥ 15 °C;

(f) addition of salt to increase the ion strength of ~~the~~ said solution; and

(g) removal by filtration of particles formed thereby.

14. (Currently Amended) The ~~A1AT~~ alpha-1-antitrypsin according to claim 13, wherein a further virus inactivation step is performed afterwards, ~~preferably~~ the further virus inactivation step comprising pasteurization in the presence of ≥ 0.5 M sodium citrate, amino acids, sugars or mixtures thereof.

15. (Currently Amended) The ~~A1AT~~ alpha-1-antitrypsin according to claim 13, wherein the ion strength of the solution is ~~preferably~~ reduced by ~~ultra-/diafiltration~~ ultrafiltration, diafiltration, or both ultrafiltration and diafiltration.

16. (Currently Amended) The ~~A1AT~~ alpha-1-antitrypsin according to claim 13, ~~wherein~~ comprising a virus inactivation ~~and/or~~ or a prion depletion ~~or inactivation~~ step ~~is comprised, preferably~~ comprising a separation of ~~virus~~ particles by nanofiltration~~, preferably with filters having pore sizes of 15-20 nm~~.

17. (Currently Amended) The ~~A1AT~~ alpha-1-antitrypsin according to claim 13, wherein the ~~A1AT~~ alpha-1-antitrypsin solution ~~fraction~~ obtained is stored as a liquid, frozen or freeze-dried preparation.

18. (Currently Amended) A medicament containing ~~an A1AT~~ alpha-1-antitrypsin according to claim 12 as a sole active ingredient or in combination with anti-inflammatory agents[[,]] ~~preferably steroids, NSAIDs~~.

19. (Currently Amended) ~~Use of the A1AT according to claim 12 for preparing a medicament for the treatment of A1AT deficiency,~~ A method of treating a degenerative phenomena of the lung, ~~such as lung fibrosis and emphysema~~ the method comprising administering the alpha-1-antitrypsin of claim 12 to a subject in need thereof.

20. (New) The alpha-1-antitrypsin of claim 12, wherein the residual detergent content is < 10 ppm.